

10/551137

We claim:

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1. A process for the single-stage preparation of polyoxyalkylene glycols by copolymerization of THF and neopentyl glycol in the presence of a heteropolyacid, 5 wherein the content of organically bound nitrogen in the neopentyl glycol is less than 5 ppm.
2. The process for the single-stage preparation of polyoxyalkylene glycols according to claim 1 wherein the content of organically bound nitrogen in the neopentyl glycol is achieved by treatment of technical-grade neopentyl glycol by recrystallization, solvent extraction or by treatment with an ion exchanger. 10
3. The process for the single-stage preparation of polyoxyalkylene glycols according to claim 1 or claim 2 wherein from 3 to 20% by weight of neopentyl glycol, based 15 on tetrahydrofuran, is used.
4. The process for the single-stage preparation of polyoxyalkylene glycols according to any of claims 1 to 3 wherein the copolymerization is carried out in the presence of a hydrocarbon. 20
5. The process for the single-stage preparation of polyoxyalkylene glycols according to any of claims 1 to 4 wherein the process is carried out continuously.
6. The process for the single-stage preparation of polyoxyalkylene glycols according 25 to any of claims 1 to 5 wherein the copolymerization is carried out at from 20 to 100°C.